

Remarks

The various parts of the Office Action (and other matters, if any) are discussed below under appropriate headings.

Allowable Subject Matter

Allowance of claims 1-11, 13 and 14 is acknowledged with thanks.

Claim Rejections - 35 USC § 102 and § 103

Claim 18 recites an interferometer system that includes, *inter alia*, an optical radiation source, a first beamsplitter, an optical circulator and an optical detector. The system includes a second optical path extending from the optical radiation source, to a reference location, from the reference location through the first and second beamsplitters to the optical detector.

Tearney et al. fails to disclose or fairly suggest an interferometer system having a second optical path extending from the optical radiation source, to a reference location, from the reference location through the first and second beamsplitters to the optical detector. Rather, Tearney et al. is understood to disclose a second optical path extending from an optical radiation source to a reference location, from the reference location to a circulator and only through a second beamsplitter, i.e., light from the reference does not pass through the first beamsplitter. The Examiner's attention is directed to FIG. 3 (reproduced in the Office Action), where light passes from reference 12 to Faraday circulator 30 and to fiber coupler 166 – and not through fiber coupler 66. Essenpreis et al. fails to cure the deficiencies of Tearney et al. with respect to claim 18.

For at least this reason, claim 18 distinguishes patentably over Tearney et al., alone or in combination with Essenpreis et al. Accordingly, the rejection should be withdrawn.

Claim 21, as amended, recites an interferometer system that includes, *inter alia*, a second beamsplitter that receives optical radiation directly from a sample and directs at least some of such optical radiation to an optical detector and a reference arm including an optical circulator and a reference element.

Tearney et al., taken alone or in combination with Essenpreis et al., fails to disclose or fairly suggest an interferometer system having a second beamsplitter that receives optical radiation directly from a sample and directs at least some of such

optical radiation to an optical detector and a reference arm including an optical circulator and a reference element. Rather, Tearney et al. is concerned with an interferometer including two circulators (see FIG. 3 of Tearney et al. reproduced in the Office Action), and Essenpreis fails to cure the deficiencies of Tearney et al.

Therefore, claim 21 distinguishes patentably over Tearney et al., alone or in combination with Essenpreis et al. Accordingly, the rejection should be withdrawn.

Claim 23, as amended, recites an interferometer system that includes, *inter alia*, a pair of beamsplitters where the first beamsplitter directs light to and receives light from a reference and a nonreciprocal optical element receiving light from the first beamsplitter, passing light to a sample and receiving light from the sample and passing it on to the second beamsplitter.

Tearney et al. fails to disclose or fairly suggest an interferometer having a pair of beamsplitters where the first beamsplitter directs light to and receives light from a reference and a nonreciprocal optical element receiving light from the first beamsplitter, passing light to a sample and receiving light from the sample and passing it on to the second beamsplitter. Rather, Tearney et al. is understood to disclose a first beamsplitter that directs light to a reference through a circulator without receiving any light from the reference. The Examiner's attention is directed to FIG. 3 (reproduced in the Office Action), where Faraday circulator 30 – not fiber coupler 66 – receives light from reference 12. Essenpreis et al. fails to cure the deficiencies of Tearney et al. with respect to claim 23.

For at least this reason, claim 23 distinguishes patentably over Tearney et al., alone or in combination with Essenpreis et al. Accordingly, the rejection should be withdrawn.

Conclusion

In view of the foregoing, request is made for timely issuance of a notice of allowance.

Respectfully submitted,

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